



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,050	12/30/2003	Sadhana Gupta	TI-22558.2	7393
23494	7590	11/28/2005	EXAMINER	
TEXAS INSTRUMENTS INCORPORATED P O BOX 655474, M/S 3999 DALLAS, TX 75265			GARCIA, GABRIEL I	
			ART UNIT	PAPER NUMBER
			2624	
DATE MAILED: 11/28/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/749,050

Applicant(s)

GUPTA ET AL.

Examiner

Gabriel I. Garcia

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 2-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Part III DETAILED ACTION

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

2. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Claims 3-5 are improperly dependent. Corrections are required

Double Patenting

3. Claims 2-5 are rejected under the judicially created doctrine of double patenting over claims 1-5 of U. S. Patent No. 6,693,719 (Gupta et al.).

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: The means of interpreting and the spawning means of claim 2 of U. S. Patent No. 6,693,719 reads on the steps of claim 2 in the current application. With regard to claims 3-5 of the current application, the limitations of claims 3-5 are covered by the limitations of claims 3-5 of U.S. Patent No. 6,693,719.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Easwar et al. (6,101,290) in view of Dye et al. (6,518,965).

With regard to claim 2, Easwar et al. teaches a computer implemented method for rasterizing a page in page description language in a multiprocessor integrated circuit comprising the steps of: interpreting said page in said PDL with a first processor of said multiprocessor integrated circuit (see col. 1, line 14 thru col. 2, line 47, which describe the steps that can be program and store in a memory). Easwar et al. teaches spawning a subtask from the first processor to another of said processors (e.g. col. 2, lines 62-65), but fails to teach tasking from the first processor to another of said processors for sorting polygon edges in increasing minimum Y coordinate. Dye et al. teaches that it is well known the art at the time of the invention to rasterize data (e.g. col. 14, lines 31-37) and sorting polygon edges in increasing minimum Y coordinate (e.g. col. 28, lines 28-

Art Unit: 2624

42). Therefore, it would have been obvious to one of ordinary skill in the art to use one of the processor's of Easwar et al. with the sorting polygons as taught by Dye et al. to because of the following reasons: 1) as suggested by Dye et al, in col. 28, lines 28-31; and 2) to allow the system of Easwar et al. to minimize the number of steps during rasterization by using polygon sorting.

5. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Easwar et al. (6,101,290) and Dye et al. (6,518,965). as applied to claim 2 above, and further in view of Inoue et al. (5,974,436).

With regard to claim 3, the combination of Easwar et al. and Dye et al. teach the use of multiprocessors and computation or sorting of polygons to generate a rasterizing page (see above), but fail to teach using a floating point computational unit and an integer multiplier unit. However, Inoue et al. teaches that it is well known in the art at the time of the invention to use a floating point computational unit and an integer multiplier unit in a power calculation. Therefore, it would have been obvious to one of ordinary skill in the art to use the processor's of Easwar et al. with computational unit and integer multiplier as taught by Inoue et al. to because of the following reasons: 1) as suggested by Inoue et al, in the abstract, and 2) to allow the system as taught by the combination of Easwar et al. and Dye et al. to increase the speed of the computation needed to calculate the minimum values for sorting the polygons.

With regard to claim 4, the limitations of claim 4 are covered by the limitations of claims 4; and Dye et al. teaches that it is well known the art at the time of the invention

Art Unit: 2624

to rasterize data (e.g. col. 14, lines 31-37) and sorting polygon edges in increasing minimum Y coordinate and detecting midpoint (e.g. col. 28, lines 28-42 and col. 29, lines 29-30). Therefore, it would have been obvious to one of ordinary skill in the art to use one of the processor's of Easwar et al. with the sorting polygons and detecting midpoints as taught by Dye et al. to because of the following reasons: 1) as suggested by Dye et al, in col. 28, lines 28-31; and 2) to allow the system of Easwar et al. to minimize the number of steps during rasterization by using midpoint polygon sorting.

With regard to claim 5, the limitations of claim 5 are covered by the limitations of claims 3 and 4; and Dye et al. teaches that it is well known the art at the time of the invention to rasterize data (e.g. col. 14, lines 31-37) and sorting polygon edges by calculating Y coordinates (e.g. col. 28, lines 28-42 and col. 29, lines 29-30). Therefore, it would have been obvious to one of ordinary skill in the art to use one of the processor's of Easwar et al. with the sorting polygons and detecting Y coordinates as taught by Dye et al. to because of the following reasons: 1) as suggested by Dye et al, in col. 28, lines 28-31; and 2) to allow the system of Easwar et al. to minimize the number of steps during rasterization by using interception polygon sorting.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 2624

Kumar et al.. (6,567,182) teaches a scan conversion of polygons for printing file in a page description language.

Ghavam et al. (5,771,045) teaches a method for polygon decomposition.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gabriel I. Garcia whose telephone number is (571) 272-7434. The Examiner can normally be reached Monday-Thursday from 7:30 AM-6:00 PM. The fax phone number for this group is (571) 273-8300.

On July 15, 2005, the Central FAX Number will change to 571-273-8300. This new Central FAX Number is the result of relocating the Central FAX server to the Office's Alexandria, Virginia campus.

Most facsimile-transmitted patent application related correspondence is required to be sent to the Central FAX Number. To give customers time to adjust to the new Central FAX Number, faxes sent to the old number (703-872-9306) will be routed to the new number until September 15, 2005.

After September 15, 2005, the old number will no longer be in service and 571-273-8300 will be the only facsimile number recognized for "centralized delivery".

CENTRALIZED DELIVERY POLICY: For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the Central FAX number, unless an exception applies. For example, if the examiner has rejected claims in a regular U.S. patent application, and the reply to the examiner's Office action is desired to be transmitted by facsimile rather than mailed, the reply must be sent to the Central FAX Number.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-2600.

Application/Control Number: 10/749,050

Page 7

Art Unit: 2624

A handwritten signature in black ink, appearing to read "Gabriel Garcia". The signature is fluid and cursive, with the first name "Gabriel" and last name "Garcia" clearly distinguishable.

Gabriel I. Garcia

**GABRIEL GARCIA
PRIMARY EXAMINER**

Primary Examiner

September 27, 2005